

West Hawaii Fisheries Survey Final Summary – May 2009

(N = 89 Responses)

1.) Should L50 be the basic standard for minimum size regulations of reef fishes?

Yes = 65 (79%) No = 17 (21%)

Comments in black are from questionnaire (Q)

- Most reef fish should fall into the L50 regulation
- Should be larger, maybe L50 + 10%
- Use L70
- Size regulations should be increased to promote re-population
- Once the populations are returned to balance - should be higher or combined with other measures until then
- Sometimes, use slot limits too
- Minimum size should be made smaller in some cases
- A minimum size regulation doesn't ensure that a species will no longer be threatened. Research needs to be done to find the true L50 of species to ensure that they really do reproduce at that age
- Unsure it has been explained to me and it makes sense to my untrained scientific mind but, I don't know enough to give what I feel is an informed answer. Some species may spawn several times a year and others maybe once a year or once every two years. L50 may be good for several times a year spawners but L75 or higher may be needed for species who spawn less frequently. I have also read research showing that some fish are becoming sexually mature at increasingly smaller sizes

Comments in blue are from public meetings (PM)

- All should be L50
- L50 for reef food fish
- L50 for all reef fish as long as it makes sense; look at each species
- If we put a rule of L50, how many times do they get to reproduce? Is it enough? Or too much? L50 means 50 % of population reached sexual maturity but many not have even been able to reproduce once yet
- Put limit on all reproductive fishes-all species-people will switch to other fish if only some species
- Use bag limits @ reproductive size
- Once they get certain size – No catch
- Example of fish sizes caught culturally is the use of the underwater imu. They may have taken smaller fishes but took only males, no females.
- Some menpachi don't grow big enough for the L50 minimum catch rules
- Menpachi (*M. kuntee*) should be 3 inches, not 6 inches; can't lump all menpachi
- Shoreline menpachi, (white belly) should be 4 inches
- Should have no take for large fish above L75
- Slot limits 9 inches OK, between that and L50 No Take

- Tangs in general should be 5 inches
- Yes, for now. Under the impression that night diving restrictions were law now and because of that there are more uhu. It was noted by DAR that the night diving restrictions were not rule yet
- What do other places use for size limits, L50 or other?
- Question too broad. Size of fish depends on food source and amount. Be more specific on species
- Need more information to answer the questions. Why do other areas use the sizes they do. We should look at their reasons and data to base our measurements on instead of a shot in the dark. We need research on what will work not just a guess
- How can we answer these questions when we don't even know what the recreational fishermen are doing?
- L50 is not well understood. More education is needed to clarify this measure
- Cannot answer question as there was insufficient information. Why is L50 being looked at? Why is L50 good or bad? Will it be enough or too much? Where is the science coming from?
- Educate people to be more responsible not to keep small fish

2.) Are there some species which should not utilize L50 as the minimum size?

Yes = 38 (50%) No = 38 (50%)

Q comments:

- Moi
- Moi should be changed from 11 inches to 8 inches. Moi at 8" are predominately males.
- Oama, halalu and ohua
- Upapalu
- Probably menpachi
- Ulua - max size uhu - hermaphrodites wrasse – harem
- Maybe ulua because they produce a much smaller percentage of eggs than a fish 10 inches bigger than the L50
- Jacks
- Achilles tang, and perhaps also the more heavily targeted goatfishes
- All rare, widely (within Hawaii) depleted, or ecologically important reef fishes - would certainly include parrotfishes, possibly also some of the prime targeted surgeonfishes
- The L50 size for Aholehole is too small, the minimum size for aholehole should be larger than the L50 size
- Uhus should be changed from 12 inches to 9 inches. Uhus are all females at that age. Wekes should be left as it is. Striped mullet changed from 11" to 9 inches. Pua should be prohibited to take by pond owners
- Some carangids, parrotfishes
- Hermaphroditic species, e.g., uhu. males and females have different size classes in these species. Regulations for only the smaller sized gender could yield low reproductive output for that gender. That would be potentially damaging to female-first hermaphroditic stocks, with fewer large females to produce large reproductive output that may be required to sustain the stock

- Depleted species - parrotfish critical species – herbivores
- While L50 can be held as a typical standard for management it should definitely be used for depleted species or species that are easily overharvested or slow growing/maturing or seem to have contracting habitats. However, species with fast growth, early maturity or seem resilient to overharvest may not need this such as akule. However, bag limits should also be used and possibly seasons
- Non endemic fish, such as *Cephalopholis argus*
- Invasive species should not be on the L50 and should be targeted to protect the non invasive species
- Roi and Ta'ape
- Imported species, such as taape
- All should have a larger limited size
- All of them. I think L100 should be more appropriate
- All species whose population size is on the decline, species with low fecundity, and target species for fishers
- All fish that are not edible. Only edible fish should use the L50 standard. Fish used in sport fishing should be protected if they are greater than a size, which would allow the biggest fish to reproduce, manta rays and other commercially useful for viewing fish should be fully protected and no taking should be allowed
- All depleted or particularly vulnerable species - of which there are many
- Most, what about an L75?
- For those who some other size makes better management sense
- Most if not all based upon the fact that reproduction usually increases with size
- Those species that have been determined to be rare or in serious decline - no take
- L50 isn't viable, as many of these species are targeted by spearfishermen - it's hard to estimate size of a fish before you spear it, and it's hard to release a fish that you have run through with a spear. And no-one remembers what the size limits are, and there are lots of different species. A better management tool, surely, would be to ban the sale of all speared fish (please, please ... it is so dang obvious!!) and to increase the number and size of reserve areas (MPAs). Your survey states fish "such as" Parrotfish (uhu), Goatfish (such as weke), and Ulua/Papio The L50 rule should not be applied to any fish taken as live aquarium fish
- Those taken as both babies by the aquarium industry and taken as large fish for food
- Example paku'iku'i (Achilles Tang)
- Probably. I would leave that to the fish counters
- More study needed
- Should only apply to fish species for which there are relevant data
- Question 2 requires scientific knowledge not generally known to the layman. You need to define L50 at the top of the page
- What is L50?

PM comments:

- Moi – had a bag limit that doesn't make sense
- Yes, uhu (pale face)
- Uhu, pale nose, for example, never gets to 12 inches
- Big fish spawn more. Decrease the minimum size, for example from 11 inches in parrotfishes to 9 inches
- What about species that grow 2-3 inches?
- Not all species have been studied for L50

- Within the regulations we need to be specific that L50 is being looked at to be used for reef food fish, not all fish
- What about other measures such as L75? How many times would a fish get to reproduce by picking a larger number? – need more information
- Where do we put limits to keep a population healthy? What limits will keep that population healthy?
- If we choose L50, is this too stringent of a regulation? Concern we are trying to use numbers that have been used in California or other areas that may not be applicable to Hawaii.
- Make an upper limit to fishes, especially females
- Most important is how much a fish can produce; leave large fish
- Same with black ulua
- Hawaiian cultural: if you shoot the big blue uhu, they don't taste good, too tough, wasted shot
- No minimum size because people don't usually take little fish home to eat

3.) Beyond the three families of priority species, are there other reef species that should have minimum size regulations?

Yes = 55 (72%) No = 21 (28%)

Q comments:

- All
- All
- All
- All!
- All Species
- All of them
- All of them
- All of them
- All of them
- Protect all fish
- All reef species
- All reef fish should have minimum size standards
- all reef fish that are commonly harvested
- All reef fish should be protected with minimum size regs
- The health of the reef depends on all species, not just the ones we want to eat
- All species are dependent on each other
- Extend to all species currently regulated with minimum size limits
- Any fish species that can be scientifically proven to be in danger and need help
- Species with population declines
- Those for which there are insufficient data
- It is important for all species to have the opportunity to reproduce in a way that will not upset the natural balance of the reef
- Probably
- Moi

- Manini, maiko, pakuikui, kole (all types) nenu, uoauoa, naenae, ma'i'i, umamaulei, laupala, palani, pualu, aho
- Aholehole, anae, kupipi, mamo, api, u'u, upapalu, aweoweo
- U'u aweoweo
- Menpachi, Uku, other whisker fish; Moana Kala, 'Joe Lewis', Aweoweo, Awa, Mullet
- Hapu'u: black grouper or Hawaiian grouper; akule; menpachi, aholehole (flagtails) surgeonfish (manini, achilles, palani, kole, orange band, kala unicornfish, naso tangs), triggerfish saddle wrasses (kids learn to spear by shooting them- even though abundant-an endemic species)
- The Hawaiian Giant Grouper, *Epinephelus lanceolatus*, should be accorded outright and complete protection.
- O'io, aweoweo, menpachi, moi, surgeonfishes (by species, esp kala, orangespine, kole, palani)
- Aweoweo (2), Mu, Nenu (3), Nohu (2), U'u (4), Kole, Hawaiian Kole, Na'ena'e, Palani, Paku'iku'i, Paulu (2), Umaumalei, Moana Kali, Munu, Weke ula, Pananu, Ponuhunuhu, Kagami, Pa'opa'o, Dobe and Omaka
- Menpachi
- Jakes, goatfish, Uhu
- Nabeta 'Aweoweo
- Akule (halulu) and nabeta
- All Ulua species; Uku
- Forage species
- Carcharhinidae, Albulidae, Chanidae, Holocentridae, Kuhliidae, Polynemidae, Mugilidae, Kphyosidae, Chaetodontidae (Aquarium), Pomacanthidae (Aquarium), and Acanthuridae
- Surgeon fish, mullets, bone fish
- Surgeon fishes
- Tangs - taken at both ends, small and large, necessary to maintain the algae levels on the reef
- Achilles Tang
- Yellow tangs along with all surgeonfishes. That would be inconvenient to the aquarium trade, so maybe you can't do that, since, after all, you seem to work for them
- Some surgeonfish species
- Yellow tang Surgeon fish peacock grouper black-banded angelfish bigeye (squirrel fish) all butterfly fishes filefishes hawkfishes moorish idols
- Max size limits should be imposed on certain fish like yellow tangs. Allowing already spawning fish to keep spawning.
- The fishes that the tropical fish collectors collect which are not on the agenda; butterflies, wrasses, tangs etc. The tropical fish collectors are also in the category you term "takers"
- Although not a reef species: We desperately need to regulate blue marlin in Hawaii
- Mahi-mahi
- Maximum or "tweener" size and minimum take would be a better strategy
- Focus on bag limits instead of size. It's not how big, it's how many
- Need more study - catch trends etc
- **PM comments:**
- Yes
- Look at all the species of fish
- 'Oama, halalu, akule, juvenile mullet (pua) for recreational only

- Why restrict “weke”? If you mean certain species of goatfish, like Kumu, then say which, don’t use term weke...that is a specific goatfish.
- Current rule for red Kumu is OK
- Current rule for weke is OK
- Moana kea fish (purple with yellow spot) lives in a different style
- This question is misleading, unclear. The question seems to imply that only these three groups of fish have minimum size
- Fish grow different rates at different ages
- Leave menpachi alone

4.) Should minimum size (and other) regulations be the same for recreational and commercial fishermen?

Yes = 67 (78%) No = 19 (22%)

Q comments:

- All regulations should be applied across the board
- Minimum sizes should be the same if commercial sale is allowed. This will simplify enforcement. Recreational fishers should be allowed to catch "trophy" sized fish should maximum size or slot limits be implemented
- No commercial sale of reef fish for food
- Limits on number harvested should be included for both on depleted species
- Recreational bag limits, as well as commercial bag limits
- Commercial should be higher number
- Regulations only for commercial fishermen
- Depends on the species

PM comments:

- Yes
- Yes, minimum size should be same for commercial and recreational
- Bag limits should be equal for commercial and recreational fishes
- Commercial fishers on reef fish should have the same bag limits as subsistence/recreational fishers
- Need a bag limit on commercial fishers
- Commercial fishers should have size limits
- No commercial fishing on the reef
- We should ban the commercial sale of reef fish (food fish)
- Shut down all commercial fishing for kaukau reef fish if you are saying there are not enough fish for all users
- DLNR priorities – if there are not enough re-sources for all three groups, limit commercial. We should follow the priorities laid out by DLNR and since commercial is the third priority so they should be the one limited
- Common sense commercial and recreational have equal rules (sizes, gear, etc.)
- Recreational users are more of a problem than commercial as commercial sellers are easier to regulate as they have to sell there fish. If they are illegal buyers won’t take them, where as recreational fisherman will give them to friends and family that don’t care

- There is more recreational fishing within the reef environment as it is shoreline fishing for families
- Ban recreational fishing, no info, they are the problem

5.) Should the sale of reef species be prohibited and only taken for personal consumption?

Yes = 69 (80%) No = 17 (20%)

Q comments:

- Yes commercial sale of reef fish should be prohibited if little or no additional regulations are implemented. No commercial sale of reef fish can be allowed if strict ag limits are implemented. Fish can still be available for sale. Commercial fishers will have to fish more often for fewer fish making supply limited and insuring a reasonably high price. More money for fewer fish
- Yes, recreational fishermen have their reasons for the amount of fish to catch.
- Favor discontinuing all commercial catches of food fish off the reef
- Until populations are rebuilt
- Inter island shipment, no commercial uhu fishing
- For some species but not all e.g. Uhu
- There should be a ban on commercial spear fishing; this practice takes the upper "L" of fishes primary because of weight per fish

P comments:

- Yes
- Yes
- Extend the above ideas to opihi and a'ama crab and other resources
- Stop sale of speared fish
- Commercial equals a money situation so no commercial fishing reef
- Need to change the law

6.) Should there be maximum size regulations (or slot limits) for fish in addition to minimum size regulations?

Yes = 71 (83%) No = 15 (17%)

Q comments:

- Slot limits seem to be a very logical approach to protecting a species. Small individuals are not worth taking. Large individuals have so much invested in them and are critical for brood stock
- A maximum size regulation could help to generate larger fish that can reproduce a lot more

- Certain fishes that reproduce at higher weights should be protected until populations are rebuilt
- Where justified by relevant data
- L-75 or L-80 would be a good upper limit. These are the breeding stock like land based ranch animals
- I would vote yes to get larger females with more eggs but unsure of the life of each species which could influence the egg aspect

PM comments:

- We need to regulations on big fish, not the small; we must let the big fish go. If we don't put limits on the big fish, you will shut yourself down
- Long term fishing shows we need slot limit regulations. That's how we get the fish back. You must leave the small ones to catch next year and leave the big ones to make more small ones
- There should be a 'fair' maximum size
- Slot limits can be used for certain fish
- Don't catch large fish of any species. They usually don't taste good and curl up on the fire, not work taking home
- We should have slot limit regulations for Ulua as they are more of a food fish
- Make L75 the max size for commercial and recreational so bigger fish can spawn
- On some fish but not all, for example max size currently is too long for some uhu
- Commercial fishing takes bigger fish because of \$ value
- Hawaii Fishing News and West Hawaii Today stress big fish and trophy fish
- Regulating pelagic (ocean going) fish is hard to do
- Educate captains to learn about importance of big size fish. Tag and release trophy ones
- Lots of resistance

7.) Should there be bag limits for reef fishes?

Yes = 77 (90%) No = 9 (10%)

Q comments:

- All
- All
- All
- All
- All
- All
- All

- All
- All
- All
- All
- All
- All
- All
- All
- All fish
- All reef fish
- All of them
- All of them
- All of the above
- All. (liberally start applying regs)
- Definitely yes, and All of them
- All species including Invertebrates
- All reef fish should have reasonable bag limits
- All, but as long as they are reasonable bag limits. People with no interest or knowledge regarding fisheries in Hawaii should stay out of this discussion, as this is not really relevant to them (i.e. snorkeling tour interests, environmental activists, etc.)
- All of them - take only what you need on a daily basis. Don't stash in the freezer or give to all and sundry
- All reef fishes except imported species
- All. If there were effective bag limits, it might be possible to allow commercial sale of reef fish in a closely managed manner
- All species currently regulated with minimum size limits and aquarium fishes
- Bag limits should apply to all reef fish
- Bag limits should be set by area/county
- All bag limits need to be set at personal consumption
- Change bag limit to possession instead of per day
- Dependent on geographic area and habitat structure - those species surveyed as in-danger should be limited take
- Any determined by DAR biologists to be depleted
- Manini, maiko, pakuikui, kole (all types) nenu, uoua, naenae, ma'i'i, umamaulei, lauipala, palani, pualu, aholehole, anae, kupipi, mamu, api, u'u, upapalu, aweoweo
- Manini, triggers, tangs, angels.
- Surgeonfish
- All the surgeons, parrots
- Uhu
- Parrotfish, Goatfish, Redfish, Surgeonfish, some larger wrasse
- Parrotfish, surgeonfish, goatfish, soldierfish, jacks, uku
- Probably should be some bag limit for male parrot fish, (especially if you aren't going to ban sale of speared fish)
- Papio/ulua/uhi (lower than 20)
- Big ulua and small papio. Uhu can be found in large numbers and doesn't seem to be threatened

- Hapu'u: black grouper or Hawaiian grouper; akule; menpachi, aholehole (flagtails) surgeonfish (manini, achilles, palani, kole, orange band, kala unicornfish, naso tangs), triggerfish saddle wrasses (kids learn to spear by shooting them- even though abundant-an endemic species)
 - Akule, particularly commercial catches which should be limited to 50 fish/day if they are allowed to continue). Parrot fish
 - Herbivores, tako, moi, oio, apex predators like ulua
 - Ulua, uhu, mu, kumu
 - Moi, kumu
 - Yellow tang, surgeon fish, peacock grouper, black-banded angelfish, bigeye, squirrel fish, all butterfly fishes, filefishes, hawkfishes, moorish idol
 - Schooling species
 - For schooling fish, and any fish species whose numbers are declining
 - Ones that are most commonly harvested (have greatest fishing pressure)
 - Menpachi
 - Also seasonal Kapus when fish are more vulnerable. Based on trend data of populations - it's a useful tool
 - Lacking scientific data, most bag limits will be arbitrary at best. Most fisherman catch a "mixed bag" of fish and not all particular species. Maybe we could group species by size, place on the food chain, gear used in taking etc... i.e. x amount of "small", x amount of "medium" and x amount of "large" fish per person per day
 - Very unfair to the recreational fisherman. The commercial fisherman can take any amount until the federal government closes it
 - How will this be enforced? There is no one watching
- PM comments:**
- Yes! Bag limits for recreational/subsistence and commercial fishing... equal limits for both types of fishers
 - Yes, should be but what about parties-luaus?-Permits should be allowed
 - Bag limits especially for commercial fish
 - We need bag limits for Halalu and Oama – can't put sizes on these fish as you net them. These fish are commonly caught recreationally
 - Some recreational fishers take more than for family and sell, should be bag limits
 - Not necessary. Recreational fishers only take for their family.
 - Bag limits on each island may need to be different to meet the needs of each island

8.) Should the following rules apply to blue/green male parrot fish:

Kapu (no take) = 32 (39%) Both size and bag limits = 42 (50%)
 Size Limits = 4 (5%) Bag Limits = 5 (6%)

Q comments:

- Yes to all, as parrot fish as herbivores are essential to food chain dynamic
- Should be kapu because they are the largest grazers
- No-take of blue/green male uhu is an intriguing management tool option. If implemented, would harem females focus on breeding rather than becoming the male? What triggers a female to become a male? Is it the lack of a male open/unclaimed space on a reef or

something else? Would large protected males damage or benefit reefs? I think no take of blue/green male uhu would be a good rule to test. If it doesn't work we can change it before any irreparable damage occurs

- Bag limit of 5, slot limits should be imposed question
- Size limits: reduce the individual size to 9 inches and prohibit the take of parrot fish above L-75
- Plus regs regarding methods and seasonal controls. e.g. scuba spear fishing
- For awhile

PM comments:

- For uhu there should be no take of large blue/green males and females (the reproducers)
- There should be both size and bag limits
- Bag limits for commercial fishers and recreational fishers
- Should be a maximum size for each species, based on good science. Maybe L75 +/-
- Maybe like with hunting there should be a lottery system used for fishing terminal parrotfish with only a small number of licenses granted
- Which is better -to take the females or males?
- If you don't allow taking males then what the repro
- Don't disallow males catching of uhu
- Need a spawning kapu system for uhu
- What defines bag limits in terms of time: Bag limit for the day? 24 hrs? It was generally agreed that we are talking about bag limit and size limit you have in your possession. (this should be make really clear to all fishers... what we ended up with that night – possession... is still not sustainable)

9.) Should additional No-Take Marine Protected Areas be established in West Hawaii?

Yes = 67 (78%) No = 19 (22%)

Q comments:

- No take MPA's should be the primary focus of management efforts at this time
- Expand size of current MPA's and add more throughout state
- MPA's already established in West Hawaii should be considered to have additional restrictions placed on them prior to establishing more MPA's. Restrictions such as No commercial activity, no motorized vessels and no go zones. These and more are what MPA's truly comprise of. Not just No Take Zones. The above answer and comments are intended to be used for the management of reef species which are commonly targeted for food
- Some of the FRA's should be turned into no take areas
- Scientific studies (including Bill Walsh's stellar work) have shown MPAs to be the single most effective tool for management of reef fishes. Why would we do otherwise?
- Put in more depleted areas to allow population rebuilding

- Put No-Take Marine Protected Area in Honaunau Bay
- MPAs should be based science not on special interest groups
- A no take protected area should have no use by anyone, boaters & divers included
- "No take" areas if implemented should also be synonymous to "no use" areas. everyone should be treated the same
- There should be kapu areas where 'no nothing' can be. No humans for any reason
- No take areas thus far show little or no evidence of perpetuating species. Only illegal activities occur. No take marine protected areas should also be defined as no use marine protect areas. These areas should be void of human activities that creates pollution, harassment and from the enforcement point of view, anyone in the area gets the same fine as a poacher.
- If an area is protected/not take the there should be no aquaculture cages in the area
- There should be exceptions, for example ancestrally tied people who have continued to use the area
- No no take areas, now I need large no take areas for community recover including recovery for apex predators
- The term protected area should be defined/clarified better

PM comments:

- Yes
- Yes
- We need more MPA's
- Many places are now using no-take areas. For here if we create no-take areas it could make it the easiest to enforce. If we create areas that is no-take for everything using the places like the Great Barrier Reef as an example. Since these areas would be off limits to everything, and everyone knows if someone is there its illegal plan and simple. This way the people can also help enforce – if it's size and bag limits we don't all know the rules, but an area is easy
- The Great Barrier Reef has more than just no-take, they have no commercial, no activities, only swimming, no boating, maybe we should have areas that are more than just no-take but no use
- More people have purchased boats-more access
- Why not study to look at the most probable area to set aside?
- Set aside areas that are not accessible
- The bad weather off No. Kohala gives a natural refuge to fish
- The recent blocking of public access by gated communities in a sense gives fish refuge
- Too many No Take Zones results in over fishing open areas
- No
- No
- No

10.) Should DAR focus only on minimum sizes at this time or should they also consider other management tools as noted above?

Just Minimum sizes = 16 (20%) **Other management tools (please list) = 66 (80%)**

Q comments

- Consider all tools to re-establish populations
- DAR should employ all management tools at its disposal to protect reef species. Improved enforcement of existing and new regs is also necessary
- DAR should consider all aspects of management. Minimum size, slot limits, bag limits, seasonal closure, MPA's with various restrictions or just no take, limited lottery permits and recreational marine fishing licenses. Having flexibility to adjust regulations from season to season is important. If conditions change and stocks plummet then stricter regulations could be imposed. Likewise, should a species experience a tremendous boom such as the aweoweo did a few years ago, regulations could be relaxed
- Slot limits, bag limits, the gamut, otherwise you'll have an unsuccessful and totally failed scenario as you do with the Waikiki MLCD. Make one comprehensive effort and make the whole thing work to start with, rather than create these small ineffective changes that just anger everyone - for the inconvenience and for the lack of results. It's frustrating when it's so blatantly clear the resource needs regulation in the face of declining expectations and officials lack the clarity to manage and restore resources properly. Here's a litmus test for good management: if both sides are mad at you, you're doing a good job
- Whatever makes management sense
- All species are currently in decline, conservation is essential
- We need to regulate and manage our fisheries. It has been a free for all for too long. If we start now then there will still be fish for managed consumptive use. We don't want it to look like Oahu in Kona
- The evidence presented, shows a disgraceful lack of proper management of the resources by all parties involved from the individual recreational fisherman through the legislative bodies responsible for regulations. Conservation of remaining resources is essential
- As with any good democracy the power of the people should determine the nature of the management of their natural resources. Additional tools should either be represented by a petition, sufficient public hearings, or ultimately a public vote
- Everything must be done to protect our fragile environment. Wake up
- Whatever it takes to protect reef fish of all size, species, etc. All fishing should be prohibited in Puako and Waialea Bay. These are pristine reef areas and unique on the Big Island and there is no need to fish here neither for consumption nor for aquaria purposes. There is also the issue of fishing lines and hooks being at odds with snorkelers and swimmers
- DAR should use a sensible combination of biologically defensible size limits, bag limits, seasonal closures to protect spawning and in extreme cases kapu all take of some species if necessary. There are enough closed areas if more of these other management tools can be brought to bear. Put more money into designing these regulations and hiring enforcement officers. I have seen a good effort on publicity in recent years with posters but raise money so they can be posted up all over and get local celebrities to get the word out on TV spots. Don't stop fishing with MPAs which only puts you on the opposite side of the table from the fishing and general public. We don't want a glass aquarium but do want to see the return of a healthy reef we can enjoy. One more thing, if it is not already I would definitely outlaw scuba spearfishing day and night and scuba lay and bag net
- Surely you know the options, in addition to maximum size, bag limits, MPAs and the rest
- Bag limits, seasonal kapus, size limits, etc
- Bag limits
- Slot limits
- Slot limits

- Slot size for non endemic fish super males in parrot families
- DAR should also incorporate slot sizes and have the authority to ban take species of concern at certain locations based on need
- Lower minimum size as stated above and prohibit the taking of large sizes (L-75 - 80)
- Need to protect the little ones and the large mama's who produce the most eggs
- The mindset of fishermen is to catch the biggest fish possible. We place restrictions on minimum size but it is the larger fish that produce the most offspring. Fishing should be regulated according to spawning seasons as well as limiting size of catch
- Age at which fish produce the most eggs, and the least. There maybe should be more effort and spread of information regarding bigger fish producing more eggs like the ulua species, than the smaller fish. So all tournaments going for the largest fish are negatively impacting the chances for increased stocks and abundance. Management on take limits per person and sizes of species to better safeguard fish for the future
- L-50 will do nothing to improve the stocks. Bag limits need to be implemented. The extraction of the resources is what needs to be reduced
- Maximum numbers/bag limits for all fish. Commercial fishing should be allowed but closely regulated
- For now, but bag limits should follow soon after with reasonable and justified rationale
- Just minimum sizes
- Just minimum sizes
- **(re: MPAs)**
- Closed seasons and closed areas for some fish
- Kapu system for parrot fish, more MPAs, bag limits
- Maximum size regulations Gear restrictions (no spearing on SCUBA); No-take Areas for management of other species
- Marine managed areas such as herbivore fisheries management areas, no-take marine protected areas, no-take and only scientific visitation marine protected areas, and no-take and no-visitation marine protected areas (completely closed)
- Extensive MPAs, please. These should be permanent, and well-signposted, and ban all types of fishing for all people. They are relatively easy to establish ... all it takes is a willingness to be proactive, and not let people's individual greed override the common good
- MPA's, limit's on fishing here by non residents
- Size and bag limits. Enforce bag limits. Enforce size limits
- No-take zones, bag limits
- No take areas, bag limits, and minimum size limits
- More no-take zones (such as Kona Paradise/Pebble Beach)
- No take areas and no scuba spear fishing
- Large closed areas in the Main Hawaiian Islands
- Floating or roving kapu sites. Better enforcement of reg's
- Those places that are identified as overfished and lacking habitat protection should not be fished during odd years
- Please pursue no take zones with enforcement and fishing licenses to pay for enforcement. Please support the manta protection bill.
- Marine no take areas and no destructive fishing methods, trampling, gill net

- Increased use of marine managed area. Consider total ban on sale of reef fish. Severe limits on take of rare, ecologically important, and seriously depleted species

(re: Enforcement)

- Enforcement is poor to nonexistent. Fining someone for infractions is a failure in law enforcement. The damage is already done. Prevention and deterrence should be the practice of law enforcement. This is done by visibility
- Petition state legislature to have a review of DOCARE enforcement practices (or lack thereof), and potentially re-structure DOCARE and add more enforcement personnel to staff.
- Random checks and fee assessment after warning. coordinated and funded by enforcement monies
- Make it easier for DOCARE officers to inspect coolers
- The real problem with this well-intended attempt at regulation is that there will be no responsible, well-educated State personnel to police the catch coming to shore. Since the harvesting area is thousands of miles (add up the coastlines end to end) there will obviously be selective and ineffective enforcement
- Because of the inability of DOCARE to properly monitor and enforce rules and regulations and because of DLNR policy that assigns the number of officers to a district, it is logical to enlist the support of communities to help with monitoring and violation reporting. Each community should be responsible for determining the needs of the resources in their area where possible. By empowering communities to take an active role in management of their resources the goals of DLNR would be met
- Increased enforcement and effective prosecution of violators is also critical. slot limits, bag limits
- Increase enforcement. Require fishing licenses

(re: Fishing license)

- Get what you can, but probably incremental regulation is best so people don't freak out. Also, a recreational fishing license is long overdue. It doesn't need to be as crazy as California's, but holds people accountable for their fishing actions and a direct revenue source for fishery enhancement
- Add fishing licenses fee of \$5.00 to allow DOCAR easier access to fishers
- A saltwater fishing license could enhance both enforcement and education efforts. The application for the fishing license must include a waiver of the right to freedom from searches.
- State licenses, use revenue to enforce regulations and conduct studies relative to assessment of the resource
- Licensing fees to pay for more enforcement officers. Even a small fee helps or a fee for tourists or non-Hawaiians
- Permits to fish or licenses (the discussion of how to get some of the Dingle Johnson funding using registered fishers) ...can be used, but they should be flexible; no cost for young,; less cost for old, etc. Reasonable price for all. Higher price for non residents
- Regulations for DAR should not be added to or amended before it is decided whether or not a recreational marine fishing license will be required/implemented. The implementation or exclusion of this one management tool will affect all other management efforts. Education,

funding, enforcement and prosecution of violators is dependent upon in one way or another a RMFL.

- Why not require visitors to buy fishing licenses? It is done in most other states and helps with expenses
- Please, please ban sale of speared fish. There is no rhyme or reason why anyone should be allowed to do this
- The sale of speared reef fish is decimating the fishery. Ban commercial sale of reef fish or the fishery will collapse especially when the Interisland Ferry starts coming to Kawaihae
- No more reef uhu is catchable without a spear. No commercial sale of reef fish
- Commercial licenses are so inexpensive that many recreational fishermen have licenses for that lucky day that they catch enough to make some money. Are they commercial or recreational? 95% of the time they are not selling their catch. Ban night spear fishing for uhu
- Discontinue all commercial fishing on the reef. Failing that, aggressively limit the harvest of nearshore schools, such as akule. For fish that appear to be reproducing slowly (such as parrot fish), institute maximum size limits. Special attention to fish such as achilles tang which are sought both by aquarium fish collectors and food fishermen. I am assuming that this is not the proper place for concerns for eels and crustaceans. If that is not the case, I recommend revising this survey
- There should be biologist monitoring the local commercial fishing by placing them on commercial vessels. The commercial fishing is decimating the populations
- Most of these management options ignore the management of the over all resilience of the ecosystem. Protecting one species at a time misses the impact of that species on the larger ecosystem. Ban sale of blue marlin in Hawaii, ban fish traps
- The selling of Pacific Blue Marlin should absolutely be banned. This is the only place on earth where it is still legal, and it a great shame for Hawaii to be the only group of people catching these great fish for sale. That would be a great step forward and easy to enforce
- Slot limits would be great. But please consider blue marlin management (i.e. no sale)
- I signed a petition to ban the sale of blue marlin in the state of Hawaii and hope this is being pursued. The petition that I signed was for a state wide ban! I heard that it may be implemented only in West Hawaii. I am against a ban for West Hawaii only as the petition that I signed clearly stated that the ban was for all of Hawaii. Applying the petition signatures to pursue a West Hawaii only ban would be a clear breach of the purpose of the petition I signed
- I like the idea of banning the sale of all reef organisms, especially now because people who do not fish can still buy aquaculture raised reef fish such as moi and kahala
- Restrict and/or prohibit taking of reef fish associated with diving/snorkeling activities
- The use of lay nets and gill nets should be made prohibitive. Pole fishing and throw nets will never deplete the fishery
- How about season restrictions? I'd like to see a seasonal kapu list for species the ancient Hawaiians used
- Moon cycle and seasonal kapus Survey should include invertebrates/mollusk since many areas have these as predominant marine population
- The tropical fish collectors should have minimum size limits of the fishes they collect. After all they are in the category of "taking", as much as they other kinds of fishermen
- Kona crab season should remain closed until October 1 because female still has eggs. Both male and female should be allow to harvest during open season. No netting spear or hooked

- Protection of the coral. Puako should be off limits
- Eradicate roi

PM comments:

- Look at all of the above
- I have attended numerous meetings over the past years regarding this subject here and on mainland and read studies from New Zealand and Australia. The science is there. Just have the DLNR set the laws and let's monitor their effect on a yearly basis to show everyone that these regulations work
- If we manage then there will be enough
- 99.9% of my customers (spear fishers) say there is a need to have regulations for catching
- We need to learn how to manage the fish so they reproduce
- DAR should use: seasonality as a tool, spawning cycles as a tool, establish juvenile protected areas
- We cannot set one regulation for all the fish
- Fish reproduce at diff times on diff islands. If that is the case-change the rules for each island
- Everyone should be regulated, locals and non-locals
- DLNR priorities – if there are not enough re-sources for all three groups, limit commercial. We should follow the priorities laid out by DLNR and since commercial is the third priority so they should be the one limited
- No, just minimum size as a restriction

(re: Enforcement)

- It all comes back to enforcement, why make laws if we can't enforce them?
- Get DOCARE involved in making all rules, so they can be enforced
- Need better enforcement; too much illegal netting and taking
- More and better enforcement of existing laws
- Need better enforcement
- Enforcement is still a problem, what is DLNR going to do about hunting and fishing?
- How many people will follow the rules without enforcement?
- Even if there are enough enforcers, how will this be done?
- Punishment should be stronger
- Fines must be big enough to make people take notice
- Need to seriously up all the consequences of the rule break-they are willing to pay the fine-still make money
- All "peace officers" should have the authority to enforce fishing regulations
- Make it easier for DOCARE officers to inspect catch
- The state should talk to the Calif. Fisheries to find out how they collect \$ to use for enforcement and other things
- Contract enforcement out. Don't have a DOCARE

(re: Fishing license)

- We need fishing license to be able to enforce the regulations
- We need license money to come back to the state
- The number one priority is to decide if we will or will not have a fishing license. This decision will affect all other aspects of regulations. If we don't have license we can't enforce many regulations we might want to create

- Regulations on fishing are very dependent upon having fishing licensing and then being able to enforce these regulations by allowing DOCARE to check coolers
- Create a license then create the number of fisherman permitted to fish. All money associated with that license should come back to the state for more research, enforcement as does in other areas
- Can we create a fishing license for \$5.00 per person to start and have all money goes to the state? This way the federal government doesn't create a license for us that we see none of the money for?
- We should have a question on the survey that if this is the price of a license, would you buy it?
- Issue with creating a low cost license is that the process may be more expensive than the license
- Use fishing licenses as a tool to educate everyone on fishing, while forcing them to take less
- One of the group members had been to Honolulu where he had been told a new license was being created that everyone will have to buy for \$15.00 with none of the money coming back to the state. Although he agreed with licensing not having the money come back, was not OK
- Fishing licenses can general a huge source of revenue for our resource management
- With licensing it shouldn't affect locals. Licensing should only be for non-residence
- Non-residence licenses should limit the amount of fish they can take (bag limits)
- Recreational fishing data is lacking
- Other states keep tabs on even recreational fishing, needs to be done here before we can even answer these questions
- Why does \$ obtained by DLNR/DAR go to the General Fund?

(re: Education)

- Enforcement and education is important. Who is going to do that?
- We need education; we need to educate people on who to fish, and why they shouldn't take everything
- DAR should use Education as a tool
- Need more education
- Need more education of fishers. Most do follow rules if they know them
- Fastest education is by rules and punishment
- More educational outreach is needed
- We need regulation and education
- To educate we need to regulate
- Before any and all tournaments there should be an educational talk on fishing along with the safety talk
- We need to look at how people are using tools. We can regulate catch, but if we don't get ride of nets which just catch everything it won't work. We need to limit some fishing types to have limits on bag numbers and sizing
- We need regulations on traps and nets
- Ban set nets
- Ban gill netting
- What is the difference between gill nets & lay nets? DAR should decide which words to use or define these

- 5 or 6 years ago gill net/cross net people with very, very long nets took lots of fish
- Which is worse? Night time spear fishing? Traps? Nets? All were felt as destructive methods being currently used
- No traps
- Why are we allowing people to catch aquarium fish?
- Educate people on Kona crab throwback idea
- Other species also need regulations such as the Pacific Blue Marline – this species should be banned to sale
- Lots of people fishing menpachi now-last 5 yrs
- Don't allow spearing of Kumu
- To increase fish population ban all fishing w/supplied air and SCUBA and ban speared fish sale
- In any management plan or regulatory action I would like to see a total ban on spearfishing with scuba gear. I would also like to see a ban on spear fishing at night. These are two "no-brainer" management measures that would be relatively easy to enforce and would limit the exploitation of certain resources, parrot fish in particular but also other species. Some countries/territories in the Pacific islands have taken steps to ban one both of these practices and I am continually surprised that Hawaii has not done so already. I think that night spearfishing without scuba tends to be practiced by certain ethnic groups/recent immigrants who know how productive this can be and who are used to doing it in their home countries. I would encourage the implementation to move as fast as possible within the system. There are continually new arrivals within these groups; a general ban should involve some fairly high profile publicity island-wide without necessarily singling out these groups or targeting them specifically
- The young 20 something males are most in need of education about spearfishing impacts
- Ban fishing of all reef fish-they "protect" the reef
- Ban inter-island shipping of reef fish
- Concern-if fisherman is fishing from a cliff or other rough shoreline and takes a prohibited size fish, the fish will probably be killed by throwing it back, or have already been mangled in rough/rocky areas
- There is no need to regulate ulua as they are more of a trophy fish, they have no commercial value. There is no decline seen in the population. This species is protected as they can't be eaten due to ciguatera poisoning
- Some species are more trophy species (like ulua) than food fish that are on the list. These species need different regulations
- We need to change the regulations on the pale nose parrot fish. Currently it is the only parrot fish illegal to catch as its max size is 12 inches and it only reaches 12inches
- More fish ponds needed, like Hawaiian culture, to feed the population
- Utilize aquaculture, for example at NELHA
- Don't do aquaculture; if you take care of the reef, we'll have fish
- Don't allow juvenile mullets to be taken from the wild for fishpond raising because people can't tell difference between species and they take all mullet species. They don't allow juveniles to grow up in the wild and reproduce
- Bounty on roi and taape...maybe a tax credit
- Taape taking juvenile Kona Crabs; this fisherman has found them in the taape stomach
- Moi settle in open ocean then come inshore
- We fish and share our fish with those who don't have

- How much are outside factors (climate change, pollution, warmer water, etc.) influencing the fishing? Decline in fishing can be caused by other factors than overfishing
- People cannot wait till Super Ferry gets to Big Island
- Must fix the political system
- When the sugar plantations were working and throwing bagasse into the ocean, juvenile moi and other fishes were able to live among the flotsam not now
- We have 9 more golf courses